Detailed resource utilization data were collected for all patients from 8 countries (U.S.,Australia,Canada,Germany,Italy,Spain,UK and France; n = 3373 prasugrel, n = 3332 clopidogrel). Hospitalization costs were estimated from the perspective of the German health care system on the basis of diagnosis-related groups (DRGs) for Germany and in-hospital complications. Costs for cardiovascular medications were estimated using public price per tablet (clopidogrel = €2.68/day; prasugrel = €2.94/day). Life expectancy (LE) was estimated based on in-trial cardiovascular and bleeding events, using statistical models developed from a similar population from the Saskatchewan Health Database. Costs in added years of life were not included in the base case. The analysis was carried out for the overall cohort and the 10 mg. recommended population of patients with no history of stroke/TIA, age < 75 and body wt. >=60kg. **RESULTS:** Over a median 14.5 month follow-up period, average total costs were €15/patient (€20/patient for the 10 mg. recommended population) lower with prasugrel, due to a lower rate of rehospitalization involving PCI. Prasugrel was associated with LE gains of 0.102 years (0.129 for the 10 mg. recommended population), due primarily to the decreased rate of non-fatal MI. Compared to clopidogrel, prasugrel was thus an economically dominant treatment strategy. When compared to generic clopidogrel at a cost of = €1.80/day, there was an incremental net cost with prasugrel of €281/patient (€285/patient for the 10 mg. recommended population), and an ICER of €2743/life year gained (€2213/life year gained for the 10 mg. recommended population). **CONCLUSIONS:** For ACS patients with planned PCI, prasugrel for up to 15 months compared with current standard of care is an economically attractive treatment strategy.

PCV88

THE COST EFFECTIVENESS OF AMBRISENTAN FOR THE TREATMENT OF PULMONARY ARTERIAL HYPERTENSION IN IRELAND

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OBJECTIVES: Ambrisentan, a non-sulphonamide endothelin receptor antagonist (ERA) was recently licensed for the treatment of Pulmonary Arterial Hypertension (PAH). The study objective was to estimate the cost-effectiveness of ambrisentan from an Irish Healthcare perspective. **METHODS:** A discrete event simulation model developed by United BioSource Corporation was used to compare the cost-effectiveness of ambrisentan relative to two other ERAs (bosentan, sitaxentan) over a five year time horizon. The probability of clinical worsening and liver abnormality events were predicted from regression equations derived from the ambrisentan clinical trials data. These regression equations were also used to predict events for the comparator therapies by calibrating them to reproduce treatment effects consistent with those reported in the literature. Costs and utilities were then assigned to these events and were discounted at 3.5%. Costs were obtained from Irish specific and UK sources and were in 2007 prices. Utility values were derived from ambrisentan clinical trials. **RESULTS:** It was estimated that ambrisentan is cost saving with improved health outcomes compared to both bosentan and sitaxentan; ambrisentan dominated both bosentan (–€195,788/QALY) and sitaxentan (–€138,780/QALY). This result was driven by the higher incidence of liver abnormalities associated with bosentan and sitaxentan compared to ambrisentan. When patients experienced liver abnormalities a proportion of them switched to prostacylin therapy, which was more expensive and associated with lower QALYs than ERA therapy. Probabilistic sensitivity analysis revealed that the likelihood of ambrisentan dominating bosentan and sitaxentan was 86% and 73%, respectively. **CONCLUSIONS:** Ambrisentan is a cost-effective alternative for the treatment of PAH in Ireland. This is because it results in a lower incidence of liver abnormalities compared to existing ERAs.

PCV89

PRASUGREL COST-EFFECTIVE RELATIVE TO CLOPIDOGREL IN PATIENTS WITH ACUTE CORONARY SYNDROME UNDERGOING PERCUTANEOUS CORONARY INTERVENTION FROM THE PERSPECTIVE OF THE UK NATIONAL HEALTH SERVICE? A MODEL-BASED ANALYSIS

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OBJECTIVES: In patients with acute coronary syndromes (ACS) undergoing percutaneous coronary intervention (PCI), the TRITON-TIMI 38 trial (TTT) demonstrated that treatment with prasugrel vs. clopidogrel significantly reduced rates of atherothrombotic events, though with increased risk of bleeding. We evaluated the long-term cost-effectiveness of this approach in patients free of stroke or TIA, from the perspective of the UK National Health Service. **METHODS:** A Markov model was developed based on risk equations for cardiovascular death, myocardial infarction (MI) or stroke, bleeding, and rehospitalisation, derived from TTT (N = 13,608 patients). Hospital readmissions captured during the trial in all patients from 8 countries (N = 6,705) were assigned to UK diagnosis related groups. After 12 months, common rehospitalisation costs were modelled to accrue over the life-time time horizon. **RESULTS:** During the first year incremental drug cost of prasugrel (+£162/patient) was partially offset by hospital cost savings (–£14/patient) due principally to reduced revascularization rates. Over the longer-term, prasugrel was associated with higher total costs resulting from rehospitalisations among survivors, of +£169/patient, with life expectancy gains of 0.06 years primarily due to reduced rate of MI, and 0.05 additional QALYs. Incremental cost per life year gained and per QALY gained were £2,606 and £3435 respectively. These results were consistent across subgroups, with incremental costs per QALY gained of £4494 in UA/NSTEMI, £2167 in STEMI, and £3461 in patients without any of three risk factors for bleeding (prior TIA/stroke, weight < 60kg, age ≥ 75 years). **Probabilistic sensitivity analysis indicated a 72% probability** of prasugrel being cost-effective compared with branded clopidogrel at a willingness to pay of £20,000 per QALY. **CONCLUSIONS:** Prasugrel treatment to 1 year in ACS-PCI patients appears cost-effective compared with branded clopidogrel.

PCV90

PATIENTS ADMITTED TO THE ICU AFTER CARDIOPULMONARY RESUSCITATION: AN ANALYSIS OF OUTCOME, QUALITY OF LIFE AND COST-EFFECTIVENESS

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OBJECTIVES: Literature shows that patients admitted to the intensive care unit (ICU) after cardiopulmonary resuscitation (CPR) have a worse clinical and economic outcome in terms of increased length of stay (LOS) in the ICU and a high mortality. In this study we investigated survival, health-related quality of life (HRQOL), costs and cost-effectiveness of patients admitted to the ICU after CPR. **METHODS:** A prospective observational cohort analysis was performed. In the period of March 3–November 3, 2008, all consecutive patients admitted to the ICU after CPR necessitating mechanical ventilation were screened for inclusion. All data concerning demography, comorbidity, severity of disease, organ failure, ICU and hospital LOS were analyzed. Data concerning costs were restricted to hospital-related costs and further to direct costs. HRQOL before admission and 3 months after ICU-discharge was assessed using standardized questionnaires (EuroQoL 5D, Short Form-36 scores). Statistical significance was attained at $P < 0.05$. **RESULTS:** Out of 39 patients admitted because of CPR, 35 patients (66% males) with a mean age of 62 years (SD 14.6) and APACHE II-score of 26.9 (SD 9) were included. Mortality was 57%. The 15 patients that survived had an equal HRQOL before and after ICU-discharge concerning pain ($P = 0.6$), general health ($P = 0.2$), vitality ($P = 0.1$), role-emotional ($P = 0.1$) and mental health ($P = 0.9$). HRQOL was diminished on physical functioning ($P = 0.01$), role-physical ($P = 0.007$) and social functioning ($P = 0.02$). Costs per hospital survivor were €92,139, and €6,399/quality adjusted life year (QALY). A sensitivity-analysis confirmed the cost-effectiveness of ICU treatment after CPR. **CONCLUSIONS:** Mortality after CPR was high and comparable with data from literature. After three months, HRQOL was only worse when looking at physical level. Treatment after CPR necessitating mechanical ventilation was found to be a cost-effective intervention.

PCV91

COST-EFFECTIVENESS ANALYSIS OF ENOXAPARIN AS ADJUNCTIVE THERAPY WITH FIBRINOLYSIS IN SPANISH PATIENTS WITH ST-ELEVATION MYOCARDIAL INFARCTION (STEMI): RESULTS FROM EXTRACT-TIMI 25

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OBJECTIVES: ExTRACT-TIMI 25 is a prospective randomized trial of 20,479 patients with 1,279 recruited in Spain. The use of enoxaparin as adjunctive therapy for fibrinolysis in patients with ST-segment elevation myocardial infarction versus unfractionated heparin (UFH) resulted in a 17% relative risk reduction of death or non-fatal myocardial infarction (MI). Using results from the ExTRACT-TIMI 25 trial we conducted an economic evaluation to estimate the cost-effectiveness of enoxaparin in Spain. **METHODS:** Cost-effectiveness analysis was performed from the Spanish National Health Service perspective. Health resource data were obtained from the ExTRACT-TIMI 25 trial, coding according to Diagnostic Related Groups (DRGs). Medical direct costs data (procedures and drugs) were obtained from published Spanish literature. Survival and life expectancy were estimated from the Framingham Heart Study. Results are presented as incremental cost per life year gained (LYG) and cost per Quality Adjusted Life Years (QALY). To prove the robustness of the results we calculated 95% confidence intervals for both costs and results. Long-term costs were discounted at 3% annually after the first year. **RESULTS:** Considering short-term treatment results (30 days), enoxaparin achieved better results with more LYG than UFH but there was a not significant difference in total costs. The incremental cost-effectiveness ratio for enoxaparin obtained from the 30 days analysis was €977.5/LYG. When long-term (lifelong) analysis was performed the cost obtained was of €2755.6/LYG and €3442.3/QALY. **CONCLUSIONS:** Considering the usual "willingness to pay" cost-effectiveness threshold in Spain (€30,000 per LYG and per QALY) enoxaparin administered as **adjunctive therapy for fibrinolysis in ST-elevation myo**cardial infarction patients is a potentially cost-effective strategy compared with UFH in Spain.

PCV92

COST-EFFECTIVENESS OF AN EXERCISE TRAINING PROGRAM IN HEART FAILURE

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OBJECTIVES: Exercise training is an effective strategy to reduce combined clinical outcomes in heart failure (HF). Nonetheless, implementation of such programs has been restricted to university and specialized centers. Economic analysis of this